Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 19, with the following amended paragraph:

Figs. 1A-1D show four configurations of a semiconductor package. Each package contains a semiconductor die 10, a die-attach pad or "paddle" 12, metal pieces or lead fingers 14, and a plastic capsule 16. Die 10 is attached to attach pad 12 by solder or epoxy. Bonding wires 18, which may be made of gold or aluminum, for example, connect terminal pads on die 10 to metal pieces or lead fingers 14 and to die-attach pad 12. Typically, these connections, often referred to as "wire bonds," are made by thermosonic or ultrasonic welding. Die-attach pad 12 and metal pieces or lead fingers 14 were traditionally made of copper alloy coated with silver or nickel/palladium/gold. The terminal pads on die 10 are traditionally made of aluminum. However, for low-voltage, high frequency semiconductor chips, copper, which has a lower resistivity than aluminum, has become the material of choice. After ~~The~~ electrical connections have been made, die 10, die-attach pad 12 and the inner portions of lead fingers 14 are placed in a mold and a molten plastic compound is introduced into the mold to form capsule 16.

Please replace the paragraph beginning at page 5, line 22, with the following amended paragraph:

Figs. 4A-4L are similar views of a quad side package 26 containing a die-attach pad 28 and lead fingers 30, showing various plating patterns that can be formed, including spots, double rings, partially plated strips and multiple rings. The hatched ~~plated~~ areas are plated ~~hatched~~; the clear areas are roughened.

Please replace the paragraph beginning at page 5, line 26, with the following amended paragraph:

Figs. 5A-5E are cross-sectional views taken at a cross section of a lead finger or die-attach pad 32, showing several ways in which the lead finger and/or die-attach pad may be plated (hatched) and roughened (jagged line). In each drawing the left side represents the lead finger at the side of the semiconductor package or the centerline of

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die-attach pad 22. In **Figs. 5D** and **5E**, lead finger or die-attach pad 32 has a recessed area 34, which is half-etched to provide a secure locking mechanism with the epoxy molding compound. **Figs. 6A-6E** are similar to **Figs. 5A-5E** except that the bottom of lead finger or die-attach pad 32 is not roughened. Also shown in **Figs. 5A-5E** and **6A-6E** is an organo-metallic coating 38 which, as described below, may form on the surface during the etching process.

Please replace the paragraph beginning at page 6, line 3, with the following amended paragraph:

Figs. 7A-7C are cross-sectional views of a die-attach pad 36. **Fig. 7A** shows a single ring or "spot" plated area; **Fig. 7B** shows a double ring or "spot" plate; and **Fig. 7C** shows a multiple (more than two) ring or "spot" plate. In **Figs. 7A-7C** the areas of die-attach pad 36 underneath the plated areas are not roughened. **Figs. 8A-8C** are similar views of die-attach pad 36 except that die-attach pad 36 has been roughened before the plating process takes place. As indicated, the plating material (e.g., silver) fills the crevasses caused by the roughening process and the top surfaces of the plated areas are essentially smooth. Also shown in **Figs. 7A-7C** and **8A-8C** is an organo-metallic coating 38 which, as described below, may form on the surface during the etching process.

Please replace the paragraph beginning at page 7, line 19, with the following amended paragraph:

The roughening and coating are then carried out by immersing the leadframes in a etchant/coating material (step 308). The etchant/coating material can be an aqueous solution of 10% by volume Multibond 100A, 5-8% by volume Multibond 100B, 2.7-3.5% by volume Multibond C-50, and 4.5-5.0% by volume sulfuric acid (H_2SO_4), contained in a single bath. Multibond 100A is manufactured by MacDermid Inc., of Singapore. Multibond 100A is an inorganic and organic mixture which contains 0-3% sulfuric acid by weight. The compositions of Multibond 100B and C-50 are stated above. This step etches and roughens the surface of the copper alloy leadframes and simultaneously covers the surface with an organo-metallic ~~a organometallic~~ brown coating. **Figs. 5A-5E, 6A-6E, 7A-7C, 8A-8C** and **10** show an organo-metallic coating 38 covering the roughened surface.

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The etchant is heated to about 38° C. The immersion time can be from 0.5 to 1.5 minutes (e.g., 1.0 minute). The Multibond chemicals also contain a corrosion inhibitor, a water soluble polymer, and halide ion producing chemicals. The corrosion inhibitor can be one of the triazoles, benzotriazoles, imidazoles, benzimidazoles, tetrazoles, or a mixture thereof. The water soluble polymer can be one of the ethylene oxide or ethylene oxide-polypropylene oxide copolymers or polyethylene glycols, polypropylene glycols or polyvinyl alcohols, or a mixture thereof. The halide ion producing chemicals can be a sodium chloride or potassium chloride or one of the oxohalide salts or halide bearing mineral acids.

Please replace the paragraph beginning at page 10, line 11, with the following amended paragraph:

Ra is the arithmetic mean ~~main~~ deviation of the surface profile, i.e., the arithmetic mean of the absolute value of the distance from the mean line to the profile.

Please replace the paragraph beginning at page 10, line 21, with the following amended paragraph:

Leadframes with roughness values within the above ranges were found not to experience separation when formed into semiconductor packages and subjected to the moisture and temperature tests described below. Within these ranges, different degrees of roughening can be obtained by varying the process conditions. For example, in two samples representing a higher degree of roughness and a lower degree of roughness, the values in µm were as shown in Table 1.

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